their claim dependencies. Further, claim 19 has been amended to recite "The method of claim 1 leading to…". Accordingly, claim 19 as amended now appears to be linked to the method of claim 1 as set forth in MPEP § 806.05(e). The amendments do not introduce new matter within the meaning of 35 U.S.C. § 132. Accordingly, entry of the amendments is respectfully requested.

SUMMARY OF RESTRICTION REQUIREMENT

The Examiner has required restriction of claims 1-37 under 35 U.S.C. 121 to a single invention encompassed by the claims as follows:

> Restriction to one of the following inventions is required under 35 U.S.C. 121:
> I. Claims 1-10, 22, 36 and 37, drawn to methods of purifying human acid alpha glucosidase from a sample containing human acid alpha glucosidase by anion exchange or affinity chromatography, classified in class 436, subclass 161, for example.
> II. Claims 1-19, 22, 29-35, drawn to methods of purifying human acid alpha glucosidase from a sample containing human acid alpha glucosidase, wherein the sample is milk produced by a transgenic mammal expressing the alpha-glucosidase, and methods of purifying a heterologous protein from the milk of a transgenic animal, classified in class 436, subclass 161, class 800, subclass 4, 7, for example.
> III. Claims 20 and 21, drawn to human acid alpha-glucosidase, classified in class 424, subclass 94.1+, for example.
> IV. Claims 23-28, drawn to methods of treating a patient deficient in endogenous alpha-glucosidase by administration of human acid alpha-glucosidase, and a pharmaceutical composition comprising human acid alpha-glucosidase, classified in class 514, subclass 2, for example.
> The inventions are distinct, each from the other because

of the following reasons:
Inventions I and either of Inventions II and IV are mutually exclusive and independent. The methods of purifying human acid alpha glucosidase from a sample containing human acid alpha glucosidase by anion exchange or affinity chromatography of Invention I are not required for the implementation of the methods of purifying human acid alpha glucosidase from a sample containing human acid alpha glucosidase, wherein the sample is milk produced by a transgenic mammal expressing the alpha-glucosidase, and methods of purifying a heterologous protein from the milk of a transgenic animal of Invention II and the methods of treating a patient deficient in endogenous alpha-glucosidase by administration of human acid alpha-glucosidase, and a pharmaceutical composition comprising human acid alpha-glucosidase of Invention IV, and vice versa. Furthermore, each of the methods requires a separate and materially different protocol and different technical considerations.
Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the human acid alpha-glucosidase can be purified from transfected bacteria.
Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the human acid alpha-glucosidase can be purified from transfected bacteria.
Inventions II and IV are mutually exclusive and independent. The methods of purifying human acid alpha glucosidase from a sample containing human acid alpha glucosidase, wherein the sample is milk produced by a transgenic mammal expressing the alpha-glucosidase, and methods of purifying a heterologous protein from the milk of a transgenic animal of Invention II are not required for the implementation of the methods of treating a patient deficient in endogenous alpha-glucosidase by

administration of human acid-alpha glucosidase, and a pharmaceutical composition comprising human acid alpha-glucosidase of Invention IV, and vice versa. Furthermore, each of the methods requires a separate and materially different protocol and different technical considerations.

Inventions III and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be used with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case human acid alpha-glucosidase can be used in affinity chromatography.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

ELECTION

Applicants provisionally elect Group I, claims 1-10, 22, 36, and 37, drawn to methods of purifying human acid alpha glucosidase from a sample containing human acid alpha glucosidase by anion exchange or affinity chromatography, with traverse.

TRAVERSAL

Applicants respectfully traverse the Examiner's restriction requirement for the following reasons.

The restriction requirement is improper because it omits "an appropriate explanation" as to the existence of a "serious burden" if a restriction were not required. (MPEP § 803). An examination of all the claims in this application would not pose a serious burden because a search of any one of invention Groups I through IV would require searching the prior art areas appropriate to the other invention Groups. For example, the art areas identified by the Examiner for each of Groups I and II are identical. Accordingly, it would not pose a serious burden on the Examiner to search both Groups I and II.

Further, applicants have amended claim 19 to recite "The method of claim 1 leading to..."; accordingly claim 19 is now linked to claim 1. At a minimum, then, applicants assert that it is proper for the Examiner to examine claim 19 as a part of the elected Group I.

Additionally, applicants have paid a filing fee for an examination of all the claims in this application. If the Examiner refuses to examine the claims paid for when this application was filed, applicants must pay duplicative fees to file divisional applications for the non-elected or withdrawn groups of claims.

CONCLUSION

In view of the foregoing, applicants respectfully request the Examiner to reconsider and withdraw the restriction requirement and to examine claims 1-37 pending in this application.

If the Examiner has any questions or wishes to discuss this matter, the Examiner is welcomed to telephone the undersigned attorney.

Respectfully submitted,

NATH & ASSOCIATES PLLC

Date: 1 Nov. 2002

Gary M. Nath
Reg. No. 26,965
Todd L. Juneau
Reg. No. 40,669
Customer No. 20529

NATH & ASSOCIATES PLLC
1030 Fifteenth Street, N.W.
Sixth Floor
Washington, D.C. 20005-1503
Tel: (202) 775-8383
Fax: (202) 775-8396
GMN:TLJ:JBG:\restrict.roa.doc

BOX PATENT
Attorney Docket No. 24512-X

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

REUSER et al.

Examiner: T. Ton

Serial No.: 09/886,477

Art Unit: 1632

Filing Date: June 22, 2001

For: **METHODS OF PURIFYING HUMAN ACID ALPHA-GLUCOSIDASE**

Appendix A

Please amend the following claims as indicated in the following marked up copy of the claims.

2. (Once Amended) The method of claim [2] 1, wherein the column in steps (a) and (b) is an anion exchange column.

3. (Twice Amended) The method of claim [2] 1, wherein the anion exchange column is Q-Sepharose.

5. (Twice Amended) The method of claim [2] 1, wherein the anion exchange column is copper chelating Sepharose.

6. (Once Amended) The method of claim [2] 1, wherein the affinity column is lentil Sepharose.

7. (Twice Amended) The method of claim [2] 1, wherein the hydrophobic interaction column is phenyl Sepharose.

8. (Twice Amended) The method of claim [2] 1, wherein the hydrophobic interaction column is Source Phenyl 15.

10. (Twice Amended) The method of claim [2] 1, further comprising repeating steps (a) and (b) and/or (c) until the a-glucosidase has been purified to 95%, preferably 99%, more preferably 99.9% w/w pure.

11. (Twice Amended) The method of claim [2] 1, wherein the sample is milk produced by a transgenic mammal expressing the a-glucosidase in its milk.

19. (Once Amended) The method of claim 1 leading to at [At] least 95%, preferably at least 99%, more preferably at least 99.9% w/w pure human a-glucosidase.